AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

The list of currently pending claims is presented below.

l	Claims 1128. (Canceled)
l	Claim 129. (Previously presented) A device comprising:
2	a first substrate having a surface;
3	a second substrate having a surface, said first substrate and said second substrate being
1	aligned such that said surface of said first substrate opposes said surface of said
5	second substrate;
5	a first organic layer attached to said surface of said first substrate, wherein said first
7	organic layer comprises a first recognition moiety; and
3	a mesogenic layer between said first substrate and said second substrate, said mesogenic
)	layer comprising a plurality of mesogenic compounds.
l	Claim 130. (Previously presented) The device according to claim 129, further comprising a
2	second organic layer attached to said second substrate.
	Claim 131. (Previously presented) The device according to claim 130, wherein said second
2	organic layer comprises a second recognition moiety.
l	Claim 132. (Previously presented) The device according to claim 130, wherein said first
2	recognition moiety and said second recognition moiety are the same.
l	Claim 133. (Previously presented) The device according to claim 131, wherein said first
2	recognition moiety and said second recognition moiety are different.

1	Claim	134.	(Previously presented) The device according to claim 129, wherein said organic
2		layer c	omprises a member selected from the group consisting of organosulfur,
3		organo	silanes, amphiphilic molecules, cyclodextrins, polyols, fullerenes and
4		biomo	lecules.
1	Claim	135.	(Previously presented) The device according to claim 130, wherein said first
2		organi	c layer and said second organic layer are different.
1	Claim	136.	(Previously presented) The device according to claim 130, wherein said first
2		organi	c layer and said second organic layer are the same.
1	Člaim	137.	(Previously presented) The device according to claim 129, wherein said organic
2		layer c	comprises a member selected from the group consisting of:
3			$(RO)_3$ -Si- R^1 - $(X^1)_n$
4		wherei	in,
5			R is an alkyl group;
6			R ¹ is a linking group between silicon and X ¹ ;
7			X1 is a member selected from the group consisting of reactive groups and
8			protected reactive groups; and
9			n is a number between 1 and 50.
1	Claim	138.	(Previously presented) The device according to claim 137, wherein R is a
2		memb	er selected from the group consisting of methyl and ethyl groups.
1	Claim	139.	(Previously presented) The device according to claim 137, wherein \mathbb{R}^1 is a
2		memb	er selected from the group consisting of stable linking groups and cleaveable
3		linking	g groups.
1	Claim	140.	(Previously presented) The device according to claim 139, wherein R ¹ is a
2		memb	er selected from the group consisting of alkyl, substituted alkyl, aryl, arylalkyl,
3		substit	uted aryl, substituted arylalkyl, saturated cyclic hydrocarbon, unsaturated cyclic

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hydrocarbon, heteroaryl, heteroarylalkyl, substituted heteroaryl, substituted
 heteroarylalkyl, heterocyclic, substituted heterocyclic and heterocyclicalkyl groups.

- Claim 141. (Previously presented) The device according to claim 139, wherein R¹ comprises a moiety which is a member selected from group consisting of disulfide, ester, imide, carbonate, nitrobenzyl phenacyl and benzoin groups.
- Claim 142. (Previously presented) The device according to claim 139, wherein R¹ is a
 member selected from the group consisting of alkyl and substituted alkyl groups.
- Claim 143. (Previously presented) The device according to claim 137, wherein X¹ is a
 member selected from the group consisting of carboxylic acid, carboxylic acid
 derivatives, hydroxyl, haloalkyl, dienophile, carbonyl, sulfonyl halide, thiol, amine,
 sulfhydryl, alkene and epoxide groups.
- 1 Claim 144. (Previously presented) A method for detecting an analyte, comprising:
 2 contacting with said analyte a recognition moiety for said analyte, wherein said
 3 contacting causes at least a portion of a plurality of mesogens proximate to said
 4 recognition moiety to detectably switch from a first orientation to a second
 5 orientation upon contacting said analyte with said recognition moiety; and
 6 detecting said second orientation of said at least a portion of said plurality of mesogens,
 7 whereby said analyte is detected.
- 1 Claim 145. (Currently amended) The method according to claim 144, wherein the phase of
 2 said analyte is a member selected from the group consisting of vapors, gases and liquids.
 - Claim 146. (Previously presented) The method according to claim 145, wherein said vapor is a member selected from the group consisting of vapors of a single compound and vapors of a mixture of compounds.
- 1 Claim 147. (Previously presented) The method of claim 145, wherein said gas is a member selected from the group consisting of a single gaseous compound and mixtures of gaseous compounds.

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mesogens.

(Previously presented) The method of claim 145, wherein said liquid is a member 1 Claim 148. 2 selected from the group consisting of a single liquid compound, mixtures of liquid 3 compounds, solutions of solid compounds and solutions of gaseous compounds. 1 Claim 149. (Previously presented) The method according to claim 144, wherein said 2 recognition moiety comprises a member selected from the group consisting of metal ions, 3 metal-binding ligands, metal-ligand complexes, nucleic acids, peptides, cyclodextrins, 4 acids, bases, antibodies, enzymes and combinations thereof. Claim 150. (Previously presented) The method according to claim 144, wherein from about 10 to about 108 mesogens undergo said switching for each molecule of analyte interacting 2 3 with said analyte. 1 Claim 151. (Previously presented) The method according to claim 144, wherein from about 103 to about 106 mesogens undergo said switching. 2 1 Claim 152. (Previously presented) The method according to claim 144, wherein said first 2 orientation is a member selected from the group consisting of uniform, twisted, isotropic 3 and nematic and said second orientation is a member selected from the group consisting 4 of uniform, twisted, isotropic and nematic, with the proviso that said first orientation and 5 said second orientation are different orientations. 1 Claim 153. (Previously presented) The method according to claim 152, wherein said detecting is achieved by a method selected from the group consisting of visual 3 observation, microscopy, spectroscopic technique, electronic techniques and 4 combinations thereof Claim 154. (Previously presented) The method according to claim 152, wherein said visual

observation detects a change in reflectance, transmission, absorbance, dispersion, diffraction, polarization and combinations thereof, of light impinging on said plurality of

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1	Claim	155.	(Previously presented) The method according to claim 153, wherein said
2		micros	scopy is a member selected from the group consisting of light microscopy,
3		polariz	ted light microscopy, atomic force microscopy, scanning tunneling microscopy and
4		combin	nations thereof.
1	Claim	156	(Previously presented) The method according to claim 153, wherein said
2	Cimin		oscopic technique is a member selected from the group consisting of infrared
3		•	oscopy, Raman spectroscopy, x-ray spectroscopy, visible light spectroscopy,
-		•	
4		ultravi	olet spectroscopy and combinations thereof.
1	Claim	157.	(Previously presented) The method according to claim 153, wherein said
2		electro	nic technique is a member selected from the group consisting of surface plasmon
3		resona	nce, ellipsometry, impedometric methods and combinations thereof.
1	Claim	158.	(Currently amended) A device comprising:
2		a first	substrate having a first surface;
3		a secon	nd substrate having a second surface, said first substrate and said second substrate
4			being aligned such that said first surface opposes of said first substrate opposes
5			said second surface of said second substrate;
6		a first	organic layer attached to said first surface, wherein said first organic layer
7			comprises a first recognition moiety which is bound to said first organic layer,
8			interacts with said analyte, and is selected from a peptide, protein, enzyme, and
9			receptor; and
10		a meso	ogenic layer between said first substrate and said second substrate, said mesogenic
11			layer comprising a plurality of mesogenic compounds.

Claim 159. (Previously presented) The device according to claim 158, further comprising an interior portion defined as the area between said first surface and said second surface, wherein said interior portion allows communication between said analyte and said recognition moiety.

1 Claim 160. (Previously presented) The device according to claim 158, wherein said organic 2 layer is a rubbed polymer. (Previously presented) The device according to claim 158, wherein said 1 Claim 161. recognition moiety further comprises a biomolecule comprising a member selected from 2 3 a polysaccharide and a combination of a polysaccharide and a protein. (Previously presented) The device according to claim 158, wherein said first 1 Claim 162. organic layer comprises a self-assembled organosulfur or organosilane monolayer bound 2 3 to said first surface; and wherein said first recognition moiety is bound to said self-4 assembled monolayer. Claim 163. (Previously presented) A device for detecting an interaction between an analyte 1 2 and a first or second recognition moiety, said device comprising: a first substrate having a first surface; 3 a first organic layer attached to said first surface, wherein said first organic layer 4 comprises a first recognition moiety which is bound to said first organic layer, 5 6 interacts with said analyte, and is selected from a peptide, protein, enzyme, and 7 receptor; and a second substrate having a second surface, said first substrate and said second substrate 8 being aligned such that said first surface opposes said second surface; 9 10 a second organic layer attached to said first surface, wherein said second organic layer 11 comprises a second recognition moiety, bound to said first organic layer, which 12 interacts with said analyte, wherein said second recognition moiety is selected 13 from an amine, a carboxylic acid, a biomolecule, a drug moiety, a chelating agent, 14 a crown ether, and a cyclodextrin; and 15 a mesogenic layer between said first substrate and said second substrate, said mesogenic 16 layer comprising a plurality of mesogens, wherein at least a portion of said

plurality of mesogens undergo a detectable switch in orientation upon interaction

receptor; and

8			between said first recognition moiety and said analyte, whereby said analyte is
9			detected.
1	Claim	164.	(Previously presented) The device according to claim 163, wherein said analyte
2		is a me	ember selected from the group consisting of acids, bases, avidin, organic ions,
3		inorga	nic ions, pharmaceuticals, herbicides, pesticides, agents of war, noxious gases,
4		biomo	lecules and combinations thereof.
1	Claim	165.	(Previously presented) The device according to claim 163, wherein said
2		interac	tion is a member selected from the group consisting of covalent bonding, ionic
3		bondin	g, hydrogen bonding, van der Waals interactions, repulsive electronic interactions,
4		attracti	we electronic interactions, hydrophobic interactions, hydrophilic interactions and
5		combin	nations thereof.
l	Claim	166.	(Previously presented) The device according to claim 163, wherein said first
2		organi	c layer comprises a self-assembled organosulfur or organosilane monolayer bound
3		to said	first surface; and wherein said first recognition moiety is bound to said self-
4		assemb	oled monolayer.
1	Claim	167.	(Previously presented) The device according to claim 163, wherein said second
2		organie	c layer comprises a self-assembled organosulfur or organosilane monolayer bound
3		to said	second substrate; and wherein said second recognition moiety is bound to said
4		self-as	sembled monolayer.
1	Claim	168.	(Previously presented) A device for detecting an interaction between an analyte
2		and a f	irst or second recognition moiety, said device comprising:
3		a first s	substrate having a first surface;
4		a first o	organic layer attached to said first surface, wherein said first organic layer
5			comprises a first recognition moiety which is bound to said first organic layer,
6			interacts with said analyte, and is selected from a peptide, protein, enzyme, and

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a second substrate having a second surface, said first substrate and said second substrate 8 being aligned such that said first surface opposes said second surface; 9 a second organic layer attached to said first surface, wherein said second organic layer 10 comprises a second recognition moiety, bound to said first organic layer, which interacts with said analyte, wherein said second recognition moiety is selected 12 from a peptide, protein, enzyme, and receptor; and 13 a mesogenic layer between said first substrate and said second substrate, said mesogenic 14 layer comprising a plurality of mesogens, wherein at least a portion of said 15 plurality of mesogens undergo a detectable switch in orientation upon interaction 16 between said first recognition moiety and said analyte, whereby said analyte is 17 detected. 18 (Previously presented) The device according to claim 168, wherein said analyte 1 Claim 169. is a member selected from the group consisting of acids, bases, avidin, organic ions, 2 inorganic ions, pharmaceuticals, herbicides, pesticides, agents of war, noxious gases, 3 biomolecules and combinations thereof. 4 (Previously presented) The device according to claim 168, wherein said Claim 170. interaction is a member selected from the group consisting of covalent bonding, ionic 2 bonding, hydrogen bonding, van der Waals interactions, repulsive electronic interactions, 3 attractive electronic interactions, hydrophobic interactions, hydrophilic interactions and 4 combinations thereof 5

Claim 171. (Previously presented) The device according to claim 168, wherein said first organic layer comprises a self-assembled organosulfur or organosilane monolayer bound to said first surface; and wherein said first recognition moiety is bound to said selfassembled monolayer.

Claim 172. (Previously presented) The device according to claim 168, wherein said second organic layer comprises a self-assembled organosulfur or organosilane monolayer bound Response to Office Action maneu February 27, 20

	to said	second substrate; and wherein said second recognition moiety is bound to said		
	self-assembled monolayer.			
Claim	173.	(Previously presented) A device for detecting an interaction between an analyte		
		first or second recognition moiety, said device comprising:		
	a first substrate having a first surface;			
		organic layer attached to said first surface wherein said first organic layer		
	amsı			
		comprises a first recognition moiety which is bound to said first organic layer and		
		interacts with said analyte; and		
	a seco	nd substrate having a second surface, said first substrate and said second substrate		
		being aligned such that said first surface opposes said second surface;		
	a seco	nd organic layer attached to said first surface, wherein said second organic layer		
		comprises a second recognition moiety which is bound to said second organic		
		layer and interacts with said analyte; and		
	a meso	ogenic layer between said first substrate and said second substrate, said mesogenic		
		layer comprising a plurality of mesogens, wherein at least a portion of said		
		plurality of mesogens undergo a detectable switch in orientation upon interaction		
		between said first recognition moiety and said analyte, whereby said analyte is		
		detected.		
Claim	174.	(Previously presented) The device according to claim 173, wherein said analyte		
O IMILIA		ember selected from the group consisting of acids, bases, avidin, organic ions,		
		nic ions, pharmaceuticals, herbicides, pesticides, agents of war, noxious gases,		
	_			
	biomo	lecules and combinations thereof.		
Claim	175.	(Previously presented) The device according to claim 173, wherein said		
	interac	tion is a member selected from the group consisting of covalent bonding ionic		

Claim 175. (Previously presented) The device according to claim 173, wherein said
interaction is a member selected from the group consisting of covalent bonding, ionic
bonding, hydrogen bonding, van der Waals interactions, repulsive electronic interactions,
attractive electronic interactions, hydrophobic interactions, hydrophilic interactions and
combinations thereof.

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- Claim 176. (Previously presented) The device according to claim 173, wherein said first organic layer comprises a self-assembled organosulfur or organosilane monolayer bound 2 3 to said first surface; and wherein said first recognition moiety is bound to said selfassembled monolayer. 4 1 Claim 177. (Previously presented) The device according to claim 173, wherein said second organic layer comprises a self-assembled organosulfur or organosilane monolayer bound 2 to said second substrate; and wherein said second recognition moiety is bound to said 3 self-assembled monolaver. 4 (Previously presented) The device according to claim 173, wherein said first 1 Claim 178. organic layer comprises a self-assembled organosulfur or organosilane monolayer bound 2 3 to said first surface; and wherein said first recognition moiety is bound to said selfassembled monolayer. 4 Claim 179. (Previously presented) A device comprising: 1 a first substrate having a surface, wherein said surface comprises a recognition moiety, 2 3 and said recognition moiety and said first substrate are joined through a member 4 selected from direct attachment and indirect attachment through a spacer arm; 5 a mesogenic layer oriented on said surface; and 6 an interface between said mesogenic layer and a member selected from the group 7 consisting of gases, liquids, solids and combinations thereof. (Previously presented) The device of claim 179, wherein said recognition moiety Claim 180. and said first substrate are joined through direct attachment, and said direct attachment is
 - Claim 181. (Previously presented) The device of claim 179, wherein said recognition moiety and said first substrate are joined through indirect attachment through a spacer arm, and

physisorption and combinations thereof.

through a member selected from covalent bonding, ionic bonding, chemisorption,

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wherein said spacer arm comprises a member selected from the group consisting of poly(ethyleneglycol), poly(propyleneglycol), diamines, and surface-active agents.

Claim 182. (Previously presented) A device comprising:

- a first substrate having a surface, wherein said surface comprises a recognition moiety, and said recognition moiety and said first substrate are joined through a member selected from direct attachment and indirect attachment through a spacer arm; a second substrate having a second surface, said first substrate and said second substrate
- 6 being aligned such that said first surface opposes said second surface;
- 7 a mesogenic layer oriented on said surface; and
- 8 an interface between said mesogenic layer and a member selected from the group 9 consisting of gases, liquids, solids and combinations thereof.
- (Previously presented) The device of claim 182, wherein said recognition moiety 1 Claim 183. 2 and said first substrate are joined through direct attachment, and said direct attachment is 3 through a member selected from covalent bonding, ionic bonding, chemisorption, physisorption and combinations thereof. 4
- 1 Claim 184. (Previously presented) The device of claim 182, wherein said recognition mojety 2 and said first substrate are joined through indirect attachment through a spacer arm, and wherein said spacer arm comprises a member selected from the group consisting of 3 4 poly(ethyleneglycol), poly(propyleneglycol), diamines, and surface-active agents.
- 1 Claim 185. (Previously presented) A method for measuring the affinity of a recognition 2 moiety for an analyte of interest over a pre-bound analyte, said method comprising:
 - (a) contacting a first analyte with a recognition moiety for said first analyte, thus forming a pre-bound analyte
 - wherein said contacting causes at least a portion of a plurality of mesogens proximate to said recognition moiety to detectably switch from a first orientation to a second orientation upon contacting said first analyte with said recognition moiety;

8	(b) detecti	ng said second orientation of said at least a portion of said plurality of
9	me	esogens;
0	(c) contac	ting said analyte of interest with said recognition moiety, wherein said
1	con	ntacting causes at least a portion of a plurality of mesogens proximate to said
2	rec	ognition moiety to detectably switch from the second orientation to a third
3	ori	entation upon contacting said analyte of interest with said recognition moiety;
4	ane	d
5	(d) detecti	ng the third orientation of said at least a portion of said plurality of mesogens,
6	wh	ereby the affinity of the recognition moiety for the analyte of interest over the
7	pre	b-bound analyte is measured.
1	Claim 186. (Pr	reviously presented) A device for amplifying an interaction between a first
2	recognitio	n moiety and an analyte of interest, said device comprising:
3	a first sub	strate having a surface;
4	a first orga	anic layer attached to said surface of said first substrate;
5	wherein sa	aid first recognition moiety is capable of interacting with an analyte of interest
6	to	form a first recognition moiety-analyte of interest complex; and
7	a mesoger	tic layer comprising a liquid crystalline material, wherein said mesogenic layer
8	is i	in contact with said first recognition moiety, and the formation of said complex
9	inc	duces a rearrangement in a conformation of said mesogenic layer, and wherein
0	sai	d mesogenic layer amplifies said interaction.
1	Claim 187. (Pr	reviously presented) The device of claim 186, wherein the first recognition
2	moiety is	an antibody.
1	Claim 188. (Pr	reviously presented) The device of claim 186, wherein the analyte of interest is
2	selected fr	om a biomolecule, chemical warfare agent, and noxious gas.
1	Claim 189. (Pr	reviously presented) The device of claim 186, wherein said rearrangement of
2	said mesos	genic layer produces an optical signal.
1	Claim 190. (Pr	reviously presented) A copper(II)-detecting device comprising:

(X)

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- 2 a first substrate having a surface;
 - a second substrate having a surface, said first substrate and said second substrate being aligned such that said surface of said first substrate opposes said surface of said second substrate:
 - a first organic layer attached to said surface of said first substrate, wherein said first organic layer comprises a first recognition moiety; and
 - a mesogenic layer comprising a plurality of mesogenic compounds comprising a structure according to Formula X:

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- X¹¹ is a member selected from a bond, Schiff bases, diazo compounds, azoxy
 compounds, nitrones, alkenes, alkynes, and esters;
- 14 R¹¹ and R²¹ are members independently selected from substituted or unsubstituted
 15 alkyl, substituted or unsubstituted heteroalkyl, substituted or unsubstituted
 16 cycloalkyl, substituted or unsubstituted heterocycloalkyl, substituted or
 17 unsubstituted aryl, substituted or unsubstituted heteroaryl, acyl, halogens,
 18 hydroxy, cyano, amino, alkoxy, mercapto, thia, and aza;
 19 wherein at least one of said R¹¹ and R²¹ is cyano.
- Claim 191. (Previously presented) The copper(II)-detecting device of claim 190, wherein X¹¹
 is a bond, R²¹ is pentyl, and R¹¹ is cyano.
 - Claim 192. (Previously presented) A sodium-detecting device comprising:
- 2 a first substrate having a surface;
 - a second substrate having a surface, said first substrate and said second substrate being aligned such that said surface of said first substrate opposes said surface of said second substrate:

a first organic layer attached to said surface of said first substrate, wherein said first
 organic layer comprises a first recognition moiety comprising a carboxylic acid
 moiety; and

a mesogenic layer comprising a plurality of mesogenic compounds comprising a structure according to Formula X:

$$\mathbb{R}^{11}$$
 \mathbb{R}^{21} (X)

12 wherein

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- X¹¹ is a member consisting of a bond, Schiff bases, diazo compounds, azoxy compounds, nitrones, alkenes, alkynes, and esters;
- compounds, nitrones, alkenes, alkynes, and esters;

 R¹¹ and R²¹ are members independently selected from substituted or unsubstituted alkyl, substituted or unsubstituted heteroalkyl, substituted or unsubstituted or unsubstituted heterocycloalkyl, substituted or unsubstituted or unsubstituted or unsubstituted or unsubstituted or unsubstituted or unsubstituted heteroaryl, acyl, halogens, hydroxy, cyano, amino, alkoxy, mercapto, thia, and aza;

 wherein at least one of said R¹¹ and R²¹ is a member selected from cyano, hydroxy, alkoxy, alkylamine, amine, mercapto, and thia.
- Claim 193. (Previously presented) The sodium-detecting device of claim 192, wherein X¹¹ is
 a member selected from a bond and an alkene.
 - Claim 194. (Previously presented) The sodium-detecting device of claim 192, wherein R¹¹ is cyano and R²¹ is methoxy.
- Claim 195. (Previously presented) The sodium-detecting device of claim 192, wherein R¹¹ is
 cyano and R²¹ is pentyl.
- Claim 196. (Previously presented) A hexylamine-detecting device comprising:
 a first substrate having a surface;

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a second substrate having a surface, said first substrate and said second substrate being
 aligned such that said surface of said first substrate opposes said surface of said
 second substrate;

a first organic layer attached to said surface of said first substrate, wherein said first organic layer comprises a first recognition moiety comprising a carboxylic acid moiety; and

a mesogenic layer comprising a plurality of mesogenic compounds comprising a structure according to Formula X:

11 (X)

X¹¹ is a member consisting of a bond, Schiff bases, diazo compounds, azoxy compounds, nitrones, alkenes, alkvnes, and esters:

R¹¹ and R²¹ are members independently selected from substituted or unsubstituted alkyl, substituted or unsubstituted heteroalkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted heteroaryl, acyl, halogens, hydroxy, cyano, amino, alkoxy, mercapto, thia, and aza; wherein at least one of said R¹¹ and R²¹ is a member selected from cyano, hydroxy, alkoxy, alkylamine, amine, mercapto, and thia.

Claim 197. (Previously presented) The hexylamine-detecting device of claim 196, wherein X^{11} is a member selected from a bond and an alkene.

Claim 198. (Previously presented) The hexylamine-detecting device of claim 196, wherein R^{11} is cyano and R^{21} is methoxy.

Claim 199. (Previously presented) The hexylamine-detecting device of claim 196, wherein R¹¹ is cyano and R²¹ is pentyl.

1	Claim 200.	(Currently amended) A method of detecting an analyte, comprising:
2	(a) ir	ateracting said analyte with a surface comprising a recognition moiety, thereby
3		forming an analyte-recognition moiety complex, said surface comprising:
4		(i) a substrate;
5		(ii) an organic layer bound to said substrate; and
6		(iii) said recognition moiety bound to said organic layer;
7	(b) c	ontacting said analyte-recognition moiety complex with a mesogenic layer, thereby
8		causing at least a portion of a plurality of mesogens proximate to said recognition
9		moiety to detectably switch from a first orientation to a second orientation[[,]];
0		and
1	(c)_d	etecting said second orientation of said at least a portion of said plurality of
12		mesogens, whereby said analyte is detected.
1	Claim 201.	(Currently amended) A method of detecting an analyte, comprising:
2	(a) ir	nteracting said analyte with a surface comprising said recognition moiety, said
3		surface comprising:
4		(i) a substrate;
5		(ii) an organic layer bound to said substrate; and
6		(iii) said recognition moiety bound to said organic layer;
7	(b) c	ontacting said analyte with an organic mesogenic layer, thereby causing at least a
8		portion of a plurality of mesogens proximate to said recognition moiety to
9		detectably switch from a first orientation to a second orientation upon contacting
0		said analyte with said recognition moiety; and
1	(c)_d	etecting said second orientation of said at least a portion of said plurality of
2		mesogens, whereby said analyte is detected.
1	Claim 202.	(Previously presented) A method for detecting an analyte, comprising:
2	intera	cting said analyte and a mesogenic layer, wherein said interacting causes at least a
3		portion of a plurality of mesogens to detectably switch from a first orientation to a

second orientation; and

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detecting said second orientation of said at least a portion of said plurality of mesogens,
 whereby said analyte is detected.